

Claims After Amendment (Marked Up Version)

1. (Currently amended) A tray for installing, on a tire mounted on a vehicle wheel, an oriented tire chain having side chains and cross chains, by a method in which the arms of a U-shaped installation tool are connected to the ends of the side chain at one end of the tire chain and the tool is drawn circumferentially around the stationary tire with the chain trailing the tool and sliding over the surface of the tire, which tray comprises:

a base having a longitudinal axis and, at opposite ends of that axis, a rear end and a front, entrance end;

a an exterior rear wall and exterior side walls projecting upwardly from the base; a plurality of vehicle supports projecting upwardly from the base and being spaced from each other and from the side walls so as to define longitudinal channels and transverse channels for receiving and confining laid-out side chains and cross chains, respectively;

a well for receiving side chains and cross chains which have not been laid out; an interior wall projecting upwardly from the base; defining a an upwardly facing compartment adjacent the well for receiving the U-shaped tool and protecting it from damage due to the weight of the vehicle, a U-shaped tool having spaced arms connected to the ends of the side chains, which compartment has a bottom defined by the base and a side defined by the interior wall, the interior wall is being located between the well and the compartment, so as to keep said chain which has not been laid out contained in the well and thereby prevent it from coming into the compartment during storage or handling of the tray.

2. (Currently amended) A tray according to claim 1 wherein the interior wall defining the compartment is sufficiently high to protect the tool from damage by direct contact with the tire and to keep chain in the well from coming between the tire and over the tool during storage or handling and then damaging the tool by indirect contact with being forced into it by the tire.

3. (Original) A tray according to claim 1 wherein the compartment is defined by a plurality of interior walls.

4. (Currently amended) A tray according to claim 2 1 wherein (i) the well is located between the rearmost vehicle support and the rear wall and (ii) the compartment is ~~further defined by a plurality of interior walls, the base, the rear wall, and portions of the side walls adjacent thereto to the rear wall.~~

Claim 5 (Canceled)

6. (Currently amended) A tray according to claim 5 1 wherein the side walls have stacking lugs on their top surfaces and stacking recesses on their bottom surfaces directly beneath the stacking lugs.

Claim 7 (Canceled)

8. (Previously presented) A tray according to claim 1 wherein the interior wall separates the well from a substantial portion of the compartment.

9. (Original) A tray according to claim 1 which further comprises a chain element holder having a passage for receiving, locating, and restraining, from lateral movement parallel to the base, a chain element at or near the end of each side chain opposite the end connected to the U-shaped tool.

10. (Original) A tray for installing, on a tire mounted on a vehicle wheel, an oriented tire chain having side chains and cross chains, which tray comprises:

 a base having a longitudinal axis and, at opposite ends thereof, a rear end and a front, entrance end;

 a rear wall and side walls projecting upwardly from the base;

a plurality of vehicle supports projecting upwardly from the base and being spaced from each other and from the side walls so as to define longitudinal channels and transverse channels for receiving and confining laid-out side chains and cross chains, respectively;

a signal-initiating device comprising a tire-actuated position-indicating switch which initiates a continuing signal when, and only when, the tire is positioned within a zone defined by two predetermined boundaries along the longitudinal axis, so that the device is able to sense and signal the stopped position of the tire as well as the position of the tire while the tire is still moving.

11. (Original) A tray according to claim 10 wherein the switch is attached to a vehicle support in such a manner that the switch and the zone are movable parallel to the longitudinal axis.

12. (Previously presented) A tray according to claim 11 wherein the switch is located in the frontmost vehicle support.

13. (Original) A tray according to claim 12 wherein the frontmost vehicle support is substantially longer than any other vehicle support, in a direction along the longitudinal axis.

14. (Original) A tray according to claim 10 wherein the distance between the boundaries defining the zone may be varied by adjusting the switch.

15. (Original) A tray according to claim 10 wherein the switch has at least two horizontally spaced surfaces for contacting the tread of the tire, the first of the surfaces being capable of sensing a downward force within the footprint of the tire and the second of the surfaces being capable of sensing an absence of a downward force just outside the footprint.

16. (Previously presented) A tray according to claim 15 wherein the spaced surfaces are on a platform rotatable about a horizontal fulcrum in a plane perpendicular to the longitudinal axis.

17. (Original) A tray for installing, on a tire mounted on a vehicle wheel, an oriented tire chain having side chains and cross chains, which tray comprises:

a base having a longitudinal axis and, at opposite ends of that axis, a rear end and a front, entrance end;

a rear wall and side walls projecting upwardly from the base;

a plurality of vehicle supports projecting upwardly from the base and being spaced from each other and from the side walls so as to define longitudinal channels and transverse channels for receiving and confining laid-out side chains and cross chains, respectively;

a well for receiving side chains and cross chains which have not been laid out; interior walls defining a compartment adjacent the well for receiving and protecting, from damage due to the weight of the vehicle, a U-shaped tool having spaced arms connected to the ends of the side chains;

a signal-initiating device comprising a tire-actuated position-indicating switch which initiates a continuing signal when, and only when, the tire is positioned within a zone defined by two predetermined boundaries along the longitudinal axis, so that the device is able to sense and signal the stopped position of the tire as well as the position of the tire while the tire is still moving.

18. (Original) A tray according to claim 17 wherein the interior walls defining the compartment are sufficiently high to protect the tool from damage by direct contact with the tire and to keep chain in the well from coming between the tire and the tool during storage or handling and then damaging the tool by indirect contact with the tire.

19. (Original) A tray according to claim 17 wherein the well is located between the rearmost vehicle support and the rear wall and the compartment is further defined by the rear wall and portions of the side wall adjacent thereto.

20. (Previously presented) A tray according to claim 17 wherein the side walls have a relatively greater height defining the well, and a relatively lesser height near the supports, so as to contain the side chains during storage and handling of the tray yet permit free access to the side chains and unhindered lateral movement thereof during installation of the tire chain, the greater height being at least as great as the height of the supports and the lesser height being less than the height of the supports.

21. (New) A tray according to claim 1 wherein the compartment is U-shaped.

22. (New) A tray according to claim 1 wherein the interior wall has a height at least as great as the height of the tool, so that the tool does not project above the top of the interior wall when the tire chain is loaded in the tray and the tool is disposed in the compartment.

Remarks

Claims 1-4, 8, and 9 stand rejected under 35 U.S.C. 102(b) as anticipated by Planz U.S. patent No. 3,893,500. Claim 6 stands rejected under 35 USC 103(a) as unpatentable over Planz in view of Douglas et al. U.S. patent 3,845,875. Claims 10-20 have been allowed. Claims 5 and 7 have been canceled. New claims 21 and 22 have been added.

Most of these Remarks were contained in the Amendment After Final Rejection filed May 13, 2005, which was not entered.

The present application discloses a tire chain installation ramp and storage tray 110 having base 112, rear wall 114, side walls 116, a plurality of interior walls 140, chain well 142, and compartment 144. These are best shown in Fig. 17. Interior walls 140, base 112, rear wall 114, and portions of side walls 116 define compartment 144. Compartment 144 receives a separate U-shaped tool 10 (best shown in Fig. 1) which has spaced arms 12, 14. The user connects the arms of the tool to the ends (e.g., link 212L) of the side chains and, with the vehicle stopped with the tire on ramp/tray 110, draws the tool over the tire to wrap the trailing tire chain around the tire. Interior walls 140 define compartment 144, separate it from chain well 142, and keep the loose chain in chain well 142 from spilling into compartment 144 during storage or handling of the tray. Interior walls 140 and compartment 144 protect the tool from damage due to the weight of the vehicle if the user drives a tire onto it. They also prevent the tool from moving onto or under the loose chain during storage or handling.

Planz discloses a tire chain installation ramp and storage tray with the following structure corresponding to Applicant's structure:

Applicant's Structure	Planz's Structure
base 112	base 12
end wall 114	inclined members 28, 30
side walls 116	upstanding lateral edges 14, 16

vehicle supports 122b, 122c, 124, 126	main members 18, 20
transverse channels 132, 134, 136	pockets 32, 22, 34
longitudinal channels 138	inward of edges 14, 16
interior walls 140	(not disclosed)
chain well 142	in pockets 32, 34
compartment 144	(not disclosed)

Planz does not disclose a tool of any kind, or anything else that connects to the ends of the side chains.

Douglas et al. discloses stackable “tray assemblies”, each of which consists of a cover and a base. In each assembly, the cover has lugs 16, 17 and the base has a single recess G. The lugs and recesses enable the assemblies to be stacked upon one another.

For reasons which follow, Applicant believes that the rejections are not proper and respectfully requests reconsideration:

- a. In Planz, reference character 32 designates a “pocket”, not a wall of any kind. Perhaps the Office action was intended to refer to inclined member 28 or to its vertical surface. In any case, the limitation of “interior wall” in claim 1 cannot reasonably be read on a surface of an element that has been recited earlier in the claim as a “wall”.
- b. Planz does not disclose any structural feature that can reasonably be called a “compartment”. There is no structure in Planz that makes it possible to even contend that there is a distinction between the compartment and the well. Apparently the Office action is holding that the space occupied by Planz locking member 44 is a “compartment”. Such an imaginary compartment would have no function and no recognizable limits, boundaries, or other physical characteristics. One skilled in the art who was reading Planz at the time Applicant’s invention

was made would have no way to appreciate that such a “compartment” existed. It could be conceptualized only after reading Applicant’s disclosure.

- c. It appears that the Office action is contending that a single structural feature in Planz, pocket **32** or **34**, constitutes both the claimed “well” and the claimed “compartment”. (It should be noted that Planz’s pocket or well is not designated by reference character **64**, which actually designates cross links.) Such a contention suggests that claim 1 is indefinite because of double recitation of an element, but the Office action, properly, does not include an indefiniteness rejection.
- d. Planz does not disclose a wall or any other feature “located between the well and the compartment”. As pointed out above, Planz discloses the equivalent of the claimed well, which is pocket **32** (e.g., the space between inclined member **28** and main member **18**). However, Planz does not disclose or suggest the claimed compartment. There is no need for a compartment in Planz.
- e. Planz’s member consisting of locking bar **40**, locking members **42**, **44** and handle **46** is not a “tool”, as contended in the Office action. It is a permanent component of the ramp/tray device. It is not protected by any interior wall or compartment from damage caused by the tire. In fact, locking members **42**, **44** project above the nearby main member **18** and inclined end member **28**, and handle **46** is exposed at the side of the tray. Possibly this member **40-42-44-46**, not being a tool, is sufficiently robust that there is no need to protect it from damage caused by the weight of the vehicle. Applicant does not believe that the tool disclosed in the present application can be made sufficiently robust to withstand such damage without unduly increasing its size, weight, and/or cost. If it could, it probably could be placed in the chain well with the loose chain, and there would be no need for the invention claimed in claims 1-4, 6, 8, 9, 21, and 22 of the present application.

- f. As to dependent claim 2, Planz does not disclose an interior wall or other structure that is sufficiently high to keep the loose chain from spilling out of the well. In Planz, that function of restraining the loose chain in the well is performed by the above-described member the Office action calls a “tool”, which clamps down onto the loose chain.
- g. As to dependent claim 3, Planz does not disclose a plurality of interior walls.
- h. Dependent claim 4 requires that the “compartment”, not the “well” as stated in the Office action, is defined by the rear wall and portions of the side wall.
- i. As to dependent claim 6, there is no disclosure in Douglas et al. that the bases, which correspond to Applicant’s trays, have lugs or may be stacked separately. Also, there is no disclosure or suggestion in Douglas et al. that there could be stacking lugs or stacking recesses at the side and end edges of either the covers or the bases, where in Applicant’s ramp/tray they are most effective at providing stability and are out of the user’s way during loading and installation of the tire chain. In addition, there is no reason to believe that one skilled in the art, faced with the problem of conserving space when tire chain-holding trays are to be stored, would look to the food service tray art for a solution, or that, even if he were to do so, he would find it in Douglas et al. The artisan would look to the food service tray art only if he had already decided he wanted to use lugs and recesses for stacking.
- j. As to dependent claim 8, just as there is no disclosure in Planz of an interior wall “between” the well and the compartment, there is no disclosure in Planz of an interior wall “separating” the well and the compartment.
- k. As to dependent claim 9, Planz does not disclose either (i) a “passage for receiving [or] locating … a chain element at or near the end of each side chain”, or (ii) that the member the Office action calls a “tool” is connected to a side chain.

Claim 1 has been amended to recite the general method of using the tray; that the rear and side walls are “exterior” walls; that the interior wall, like the exterior walls, projects upwardly from the base; and the function and result of the interior wall and the compartment.

New claim 21 recites that the compartment is U-shaped.

New claim 22 recites that the interior wall has a height at least as great as that of the tool.

This application is believed to be in condition for allowance, and such action is respectfully requested.

If the Examiner persists in the rejections, Applicant respectfully requests that he indicate with specificity the structural elements of Planz that constitute (1) the claimed “well”, (2) the claimed “interior wall”, and (3) the claimed “compartment”. Otherwise, since there are no nominal, functional, or physical similarities in Planz to two of these claimed elements, and since the reasons given in support of the new anticipation rejection in the final Office Action merely repeat the language of Applicant’s claim 1 without identifying features of Planz alleged to anticipate, Applicant has no way of knowing the basis for the rejection at this stage of prosecution of the application. Applicant has conceded that Planz discloses an equivalent of the claimed well, but since the claims define the interior wall and the compartment with reference to the well, it is necessary for Applicant to know what structural features the Examiner deems to be the well. As mentioned above, reference character 64 in Planz indicates cross links, not a well. A marked up sketch of Fig. 1 of Planz would be most helpful, and will be essential if these structural features cannot be described in words. Two enlarged photocopies of this figure of Planz are enclosed for the Examiner’s convenience.



Respectfully submitted,

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